

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): An aluminum nitride powder comprising:  
from 40 to 70% of coarse particles having a size of 3 to 15  $\mu\text{m}$ ,  
from 25 to 40% of medium particles having a size of 0.5 to 1.5  $\mu\text{m}$ , and  
from 0.5 to 20% of fine particles having a size of 0.3  $\mu\text{m}$  or less,  
the percentages being on a volume basis, and  
wherein the aluminum nitride powder has an oxygen amount of from 0.5 to 1.5 mass%.

Claim 2 (Previously Presented): An aluminum nitride non-fired molded body comprising a molded body of a powder mixture comprising the aluminum nitride powder as defined in Claim 1 and a sintering aid.

Claims 3-5 (Canceled).

Claim 6 (Currently Amended): A process for producing ~~[[the]]~~ an aluminum nitride powder ~~according to Claim 1,~~ comprising:

dispersively mixing a raw material aluminum powder having an average particle size of at most 40  $\mu\text{m}$  and an oxygen amount of at most 0.5 mass% with a nitrogen gas in a proportion of at most 100 g per 1  $\text{Nm}^3$  of the nitrogen gas,

atomizing the gas into a reaction tube for nitriding, and

collecting, ~~the product~~ in a collection system, the aluminum nitride powder, said aluminum nitride powder comprising

from 40 to 70% of coarse particles having a size of 3 to 15  $\mu\text{m}$ ,

from 25 to 40% of medium particles having a size of 0.5 to 1.5  $\mu\text{m}$ , and

from 0.5 to 20% of fine particles having a size of 0.3  $\mu\text{m}$  or less,

the percentages being on a volume basis,

and said aluminum nitride powder having an oxygen amount of from 0.5 to 1.5 mass%,

wherein the oxygen concentration at a portion at which the temperature will be at least 100°C in the reaction tube and the collection system is controlled to be at most 100 ppm, and the product is taken out at a temperature of at most 100°C.

Claim 7 (Original): The process according to Claim 6, wherein the formed aluminum nitride powder has a BET specific surface area of at least  $10 \text{ m}^2/\text{g}$  and a value of the oxygen amount (mass%)/the specific surface area ( $\text{m}^2/\text{g}$ ) of from 0.1 to 0.2.

Claim 8 (Currently Amended): The aluminum nitride powder according to claim 1, wherein the coarse particles have a size of 5 to  $10 \text{ }\mu\text{m}$  and are present in an amount of from ~~50 to 60~~ 50 to 65 volume %.

Claim 9 (Previously Presented): The aluminum nitride powder according to claim 1, wherein the medium particles have a size of 0.8 to  $1.3 \text{ }\mu\text{m}$  and are present in an amount of from 25 to 35 volume %.

Claim 10 (Previously Presented): The aluminum nitride powder according to claim 1, wherein the fine particles have a size of 0.05 to  $0.25 \text{ }\mu\text{m}$  and are present in an amount of from 5 to 15 volume %.

Claim 11 (Currently Amended): The aluminum nitride powder according to claim 1, wherein the coarse particles have a size of 5 to  $10 \text{ }\mu\text{m}$  and are present in an amount of from ~~50 to 60~~ 50 to 65 volume %, the medium particles have a size of 0.8 to  $1.3 \text{ }\mu\text{m}$  and are present in an amount of from 25 to 35 volume %, and the fine particles have a size of 0.05 to  $0.25 \text{ }\mu\text{m}$  and are present in an amount of from 5 to 15 volume %.

Claim 12 (Previously Presented): The aluminum nitride powder according to claim 1, wherein the aluminum nitride powder has an oxygen amount of from 0.8 to 1.3 mass%.